

United States Patent [19]

Jost et al.

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[54] PREPARATION OF A HYPOALLERGENIC
WHEY PROTEIN HYDROLYZATE AND
FOOD

[75] Inventors: Rolf Jost, La Tour-de-Peilz; Niklaus
Meister, Grossshoechstetten; Julio C.
Monti, Corsier, all of Switzerland

[73] Assignee: Nestec S.A., Vevey, Switzerland

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426/63; 426/657; 426/42

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[56] References Cited

U.S. PATENT DOCUMENTS

3,857,966 12/1974 Feldman et al. 426/7
4,293,571 10/1981 Olofsson et al. 426/7
4,427,658 6/1984 Maubois 426/7

FOREIGN PATENT DOCUMENTS

0055172 6/1982 European Pat. Off. .
0087247 8/1983 European Pat. Off. .

OTHER PUBLICATIONS

Blatt et al., "A Modified Ultrafiltration Cell for Separating the Products of Proteolysis," *Analytical Biochemistry* 22, 161-165 (1968).

Primary Examiner—Marianne Cintins
Attorney, Agent, or Firm—Vogt & O'Donnell

[57] ABSTRACT

To prepare a hypoallergenic whey protein hydrolyzate product, particularly for employment in infant formula, whey material first is hydrolyzed with a proteolytic enzyme and then the enzymatic hydrolyzate is subjected to a heat treatment to denature proteins which remain intact after the first hydrolysis and which constitute allergens, and then the heated hydrolyzate is cooled. The cooled heat-treated hydrolyzate then is hydrolyzed by a proteolytic enzyme to provide a hydrolyzate substantially free of allergens of protean origin.

25 Claims, No Drawings